



This unit is part of a 4K UHD Multi-Function Extension system that allows you to extend HDMI or VGA signals along with KVM using the TCP/ IP protocol over regular Cat.5e/6/7 network cable. This extender

supports the transmission of Ultra High-Definition signals (up to 4K@30Hz YUV 4:4:4 or 4K@60Hz YUV 4:2:0) with audio and USB up to 100m on a single cable. The transmission distance can be further extended (up to 100m per segment) by using gigabit network switches, allowing the user to cascade the system without signal loss or introducing delay.

It is also possible to have the extension system's Transmitter operate in multicast mode, allowing you to send a single AV signal to a large number of Receivers within the same local network. It is useful for user to create large multi-display video walls with amazing simplicity. This system also features bi-directional IR and RS-232 pass-through, analog line level in/out, and a microphone input (on the Receiver), providing the user with a variety of audio options. The USB functionality allows the system to act like a remote USB hub which, when combined with the VGA input/output feature, provides a flexible remote KVM platform.

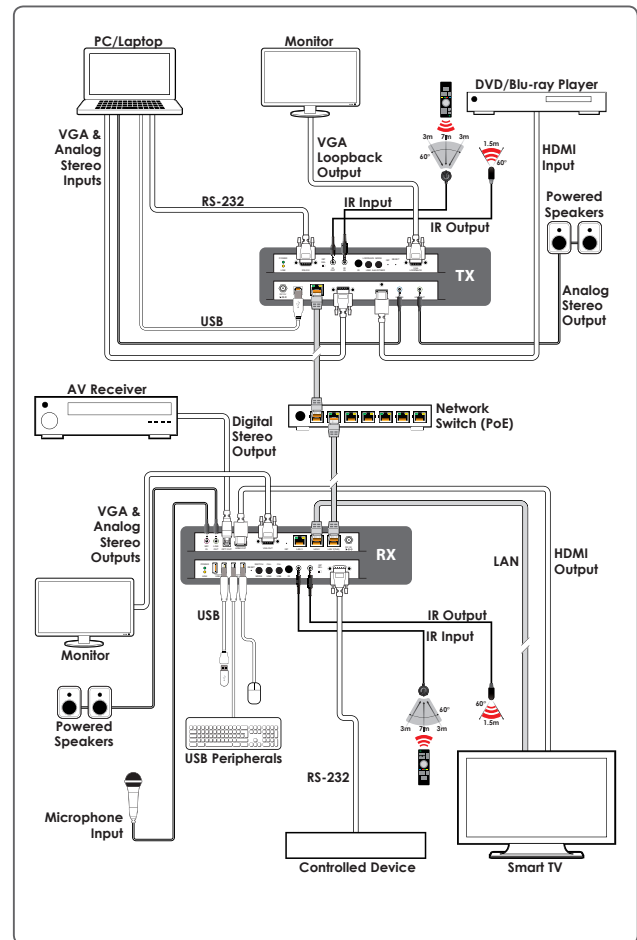
### PANELS



### FEATURES

- HDMI 2.0 and DVI 1.0 compliant
- HDCP 1.4 & 2.2 compliant
- 1×HDMI input, 1×VGA input & 1×VGA bypass output
- Video, audio and control transmission over TCP/IP in Unicast (point-to-point) or Multicast (single-to-many) modes
- Support with 90° increments rotation
- HDMI input resolutions up to 4K@60Hz (YUV 4:2:0, 8-bit) or 4K@30Hz (YUV 4:4:4, 8-bit)  
Note: 4K@50/60Hz (YUV 4:2:0) sources are automatically converted to 4K@25/30Hz (RGB) for output
- VGA input and output resolutions up to WUXGA (RB)
- Supports pass-through of audio formats including LPCM 2.0/5.1/7.1, and Bitstream over HDMI  
Note: The optical output on Receivers can only support LPCM 2.0 & Bitstream sources.
- The analog Line In on the Transmitter sends audio directly to the analog Line Out and is inserted into the HDMI output on connected Receivers
- The Mic In on the Receiver sends audio directly to the analog Line Out on the Transmitter
- Both Tx and Rx may powered directly by PoE when connected to a Gigabit Ethernet switch that provides PoE (802.3af)
- Supports USB keyboard, mouse and storage extension and IR ,RS-232 bypass
- Unit can be controlled via WebGUI, Telnet, and front panel controls

### DIAGRAM



### ORDERING INFORMATION

#### Recommended Products

<b>CDPS-CS7</b>	IP Master Controller
<b>CH-U331TX</b>	HDMI/VGA over IP Transmitter with USB/KVM Extension
<b>CH-U331RX</b>	HDMI/VGA over IP Receiver with USB/KVM Extension
<b>CH-U331TR</b>	HDMI/DP UHD AV OVER IP Transceiver with USB/KVM Extension
<b>CH-331H-TX</b>	HDMI over IP Transmitter
<b>CH-331H-RX</b>	HDMI over IP Receiver

### SPECIFICATIONS

#### Interfaces

<b>Input Ports</b>	1 HDMI (Type-A) 1 VGA 1 Unbalanced Stereo (3.5mm)
<b>Output Port</b>	1 VGA 1 Cat.5e/6/7 (RJ45) 1 Unbalanced Stereo (3.5mm)
<b>Control Port</b>	1 USB Type-B 1 IR Extender [3.5mm] 1 IR Blaster [3.5mm] 1 RS232

#### Video

<b>Input Signal Types</b>	4096×2160p@60(YUV420)		
<b>Output Signal Types</b>	VGA to 1920×1200@60Hz Analog		
<b>Input Color Depth</b>	8-bit, 10-bit, 12-bit		
<b>Output Color Depth</b>	8-bit		
<b>HDCP Compliance</b>	1.x, 2.2		
		<b>Resolutions</b>	<b>Bandwidth</b>
<b>Maximum Input</b>	HDMI	4096×2160p@60 (YUV420)	10.2Gbps
	VGA	1920×1200p@60RB	165MHz
<b>Maximum Output</b>	VGA	1920×1200p@60RB	165MHz

*Note: Bandwidth values represent the maximum supported by the interface. Processable signal maximums may be lower.*

#### Audio

<b>Input Signal Types</b>	HDMI, Unbalanced Stereo
<b>Output Signal Types</b>	Unbalanced Stereo
<b>Digital Formats</b>	HDMI 2CH LPCM, 8CH LPCM, Standard Bitstream

#### Power

<b>Power Supply</b>	5V/2.6A
<b>Power Consumption</b>	7.15W (Full load)

#### Enclosure

<b>Chassis Material</b>	Metal (Steel)
<b>Chassis Color</b>	Black
<b>Dimensions (W×H×D)</b>	231.5mm×25mm×108mm (W×H×D) [Case Only] 231.5mm×25mm×120mm (W×H×D) [All Inclusive]
<b>Weight</b>	660g

#### Field Firmware Update

WebGUI